

Remarks

Reconsideration of the subject application is respectfully requested.

Claims 2, 4, 6 and 23 are rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Examiner notes that "The recited "A reaction product" per the preamble of claim 2 constitutes indefinite subject matter as per it not being readily ascertainable as to how such further limits the antecedently recited "A composition"." With respect to claim 23, the Examiner contends that the "recited amine terminated styrene-butadiene" is indefinite as it is not readily ascertainable if monomers of styrene and butadiene or a copolymer is intended."

Applicants have amended each of claims 2 and 23 to address the alleged indefiniteness noted by the Examiner. Accordingly, withdrawal of the rejection is respectfully requested.

Claims 1-4, 6-10, 13 and 14 are rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Coran et al. The Examiner states that Coran et al. teach elastoplastic compositions defined basically as containing nitrile rubber, an amine terminated nitrile rubber, polypropylene, maleic acid modified polypropylene and other conventional additives. The Examiner states that Coran et al. teach a composition comprising a block copolymer that comprises segments derived from amine terminated nitrile rubber and maleic acid polypropylene. With respect to the dependent claims, the Examiner states that the limitations, if not taught or suggested, would have been obvious to the skilled artisan and with a reasonable expectation of success, any additional or particular claim parameters which may not be specifically set out in Coran et al. are considered to be inherent in the reference products, or not to involve anything unobvious absent a showing to the contrary. The Examiner concludes by stating that "Even if it turns out that the Examiner has somehow missed the boat and the claims are not anticipated, it would have been obvious to the skilled artisan to extrapolate, from Coran et al., the precisely defined composition, as claimed, as per such having been within the purview of the general disclosure of Coral et al. and with a reasonable expectation of success". Applicants respectfully traverse.

Applicants refer to the decision by the Board of Appeals wherein the Board stated that "therefore, the dispositive issue in this rejection appears to be the claim

construction of the contested term "comprising substantially," as recited in Part B of claim 1 on appeal. The Board determined that the transitional term "comprising substantially" rendered the claimed copolymer open to other ingredients, even in major amounts. Accordingly, the Board of Appeals felt that the scope of the transitional phrase was important in determining whether or not the Coran reference was relevant thereto. In this regard, Coran clearly teaches the presence of major additional constituents. Moreover, Coran is directed to a mixture of a) crystalline polyolefin resin and vulcanized mono-olefin rubber and b) crystalline polyolefin resin and vulcanized nitrile rubber. The presently claimed invention, utilizing the transitional phrase "consisting essentially of" cannot be considered to yield a reaction product including the Coran vulcanized nitrile rubber. Moreover, the Examiner cannot contend that the presence of acrylonitrile does not effect the basic and novel characteristics of the composition.

With respect to the various dependent claims, Applicants submit that the Examiner should set forth a clear explanation as to the basis in Coran wherein the particular claim limitations are taught. Moreover, Applicants submit that the Examiner's burden for proving obviousness is not satisfied by the statement "if not taught or suggested would have been obvious to the skilled artisan and with a reasonable expectation of success". Similarly, the Examiner's statement that "any additional in particular claim parameters which may not be specifically set out in Coran et al. are considered to be inherent" is not satisfactory under the patent laws. Moreover, inherency is a necessary result and the Examiner has not set forth any basis to show a necessary result. In short, Coran uses a vulcanized nitrile rubber (butadiene-acrylonitrile-carboxylic acid). This cannot be concluded to necessarily perform the same as Applicants' invention. Furthermore, the Coran material which is a blend of crystalline resin/vulcanized mono-olefin rubber and crystalline polyolefin resin/vulcanized nitrile rubber is not Applicant's representative maleated polypropylene and butadiene. In view of the above, Applicants respectfully request withdrawal of the rejection.

Claims 1-4, 6-10, 13, 14, 20 and 23 are rejected under 35 U.S.C. § 102(e) as being anticipated by or in the alternative under 35 U.S.C. § 103 as obvious over Liang et al. or Hesp et al. The Examiner states that Liang et al. and Hesp et al. teach stabilized polyolefin modified bitumen compositions. The Examiner notes that Liang et al. and Hesp et al. teach compositions defined basically as containing an amine

terminated polydiene such as an amine terminated polybutadiene, an amine poly(butadiene-co-acrylonitrile) and an amine terminated poly (butadiene-co-styrene), a liquid polybutadiene, a carboxylated olefinic polymer such as carboxylated homo- and copolymers of ethylene and propylene and other conventional adjuvants. Applicants respectfully traverse.

Applicants note that the presently claimed invention is directed to a reaction product consisting essentially of poly(olefin) including pendant or terminal carboxylic acid and/or anhydride thereof and a conjugated diene/conjugated diene-vinyl aromatic polymer with nitrogen containing terminal group. Applicants respectfully submit that such a claim necessarily excludes the reaction product of Liang and Hesp which comprises bitumen, an amine terminated polybutadiene-co-acrylonitrile, a carboxylated polyethylene, and liquid polybutadiene. Moreover, at least two necessary ingredients (bitumen and liquid polybutadiene) in Liang and Hesp are excluded by the present claim language. In fact, it is clear in the Liang and Hesp disclosures that covalent linkage occurs between the functionalized polymeric component and the bitumen. In fact, it is stated that a free radical reaction causes crosslinking of the polybutadiene to the functionalized butadiene and the bitumen. Accordingly, to suggest that the bitumen and liquid polybutadiene in Liang/Hesp do not materially effect the basic properties of that reaction product is to ignore the explicit teaching of those references.

With respect to claims 21 and 23, Applicants maintain that the Examiner has failed to set forth a particular basis as to why a maleated polypropylene and amine terminated polybutadiene or a maleated polyethylene and an amine terminated styrene-butadiene copolymer would be specifically selected from the Liang/Hesp disclosures. Furthermore, Applicants note that dependent claim 24 which requires at least 35% maleated polypropylene (supported by the examples showing a 35% and 50% polypropylene levels) distinguishes over the references of record. Moreover, in the Liang/Hesp bitumen compositions, carboxylated polyolefin and amine terminated polybutadiene are only insignificant portions of the reaction product. Accordingly, Applicants respectfully request withdrawal of the rejection.

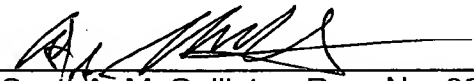
In view of the above, Applicants submit that the present application is in condition for allowance and issuance of a Notice of Allowance is respectfully submitted.

If any fee is due in conjunction with the filing of this response, deduction of that fee from Deposit Account 06-0308 is hereby authorized.

Respectfully submitted,

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